

AMENDMENTS TO THE CLAIMS

Please cancel claims 1-11, 13, 14, 16, 17, 19, 20, 22 and 23. A complete listing of the claims, including their current status, is provided below.

1-11. **(Cancelled)**

12. **(Original)** A method of introducing a sample gas into an ionization chamber having inner surfaces of super alloy, comprising:

- (a) ionizing a portion of said sample gas, thereby producing ions; and
- (b) analyzing said ions with a mass-to-charge analyzer wherein within said ionization chamber the sample gas is only exposed to said surfaces of said super alloy.

13-14. **(Cancelled)**

15. **(New)** A method of analyzing a sample, comprising:
ionizing the sample in an ionization chamber comprising an inert super alloy to make sample ions; and
analyzing the sample ions in a mass analyzer.

16-17. **(Cancelled)**

18. **(Previously presented)** A method of analyzing a sample, comprising:
a) ionizing a sample in an ionization chamber comprising an inert super alloy that provides resistance to abrasion and corrosion and that has low iron content to make sample ions; and
b) analyzing the sample ions in a mass analyzer.

19-20. **(Cancelled)**

21. **(Previously presented)** A method of analyzing a sample, comprising:
a) ionizing a sample in an ionization chamber comprising:
at least 58% nickel, 20-23% chromium, 0.1% carbon, 0.5% manganese, 0.5% silicon, no more than 5.0% iron, no more than 0.015% sulfur, no copper, no more than

0.40% aluminum, no more than 0.40% titanium, no more than 0.015% lead, no more than 1% cobalt, 3.15-4.15% niobium, no boron and 8.0-10.0% molybdenum;

58.0-63.0% nickel, 21.0-25.0% chromium, 1.0-1.7% aluminum, less than 0.10% carbon, less than 1.0% manganese, less than 0.015% sulfur, less than 0.50% silicon, less than 1.0% copper and the remaining percent iron; or

0-0.4% aluminum, 0-0.016% boron, 0-0.5% columbium and niobium, 1.5-5.0% cobalt, 16-30% chromium, 0-2% copper, 3-20% iron, 0.5-1.5% manganese, 2.5-16% molybdenum, 43-71% nickel, 0.08-5% silicon, 0.07% or less titanium, 4% or less tungsten and 0.35% or less vanadium,

to make sample ions; and

b) analyzing the sample ions in a mass analyzer.

22-23. **(Cancelled)**

24. **(Previously presented)** A method of analyzing a sample, comprising:

a) ionizing a sample in an ionization chamber comprising Inconel™ 625, Inconel™ 601 or Hastelloy® to make sample ions; and

b) analyzing the sample ions in a mass analyzer.